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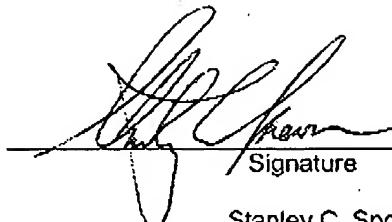
PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) SCS-124-1134	
		Application Number 10/549,817	Filed September 19, 2005
		First Named Inventor JENKINS	
		Art Unit 2883	Examiner J. Blevins

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.



Signature

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Typed or printed name

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Requester's telephone number

July 9, 2008

Date

I am the
 Applicant/Inventor

Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96)

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(Reg. No.)

Attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 C.F.R. § 1.34 _____

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.*

*Total of 1 form/s are submitted.

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STATEMENT OF ARGUMENTS IN SUPPORT OF
PRE-APPEAL BRIEF REQUEST FOR REVIEW

The Examiner's fourth and non-final Official Action mailed April 9, 2008 (Paper No. 20080325) on pages 5-12 literally restates the rejections of the final rejection dated June 6, 2007 which was held unsustainable by the Panel Decision of October 11, 2007. The previous Supporting Statement (filed September 6, 2007) is fully responsive to those arguments and is herein incorporated by reference. The Examiner's admission in the last full sentence on page 4 of the Official Action is also appreciated, i.e., "this is also the deficiency that renders the entirety of the arguments to be considered persuasive." Applicants believe that this is an admission as to the persuasiveness of the previously cited arguments in the Pre-Appeal Brief Request for Review Supporting Statement filed September 6, 2007.

While the Examiner suggests that he has a "new grounds of rejection" the only grounds of rejection appear to be the same as before. Absent clarification by the Examiner, the present Supporting Statement will address in detail the Examiner's purported rebuttal arguments raised for the first time in the fourth official action.

Error #1. The Examiner continues to fail to identify any teaching in the Tu reference of the structure of a "multiplexer/demultiplexer device"

In rebuttal, the Examiner admits he relies only upon the statement in Tu that mentions a "wavelength division multiplexing transmitter and receiver." The Examiner has ignored the §102/§103 requirement that structure which does multiplexing must be disclosed somewhere in the prior art.

In addition to not identifying any disclosure of a multiplexing device in Tu, the Examiner apparently fails to realize that the disclosed portion of the Tu reference, i.e., Figure 3, could not perform any multiplexing operation. Fig. 3 only teaches a single transmitter (laser diode 307) and receivers 310 and 311. There is no external input to the device in order to modulate the laser 307 thereby providing multiplexing. Instead, filter 303 and multilayered half-mirror 304 may serve to perform a demultiplexing

operation, but there is no structure teaching any multiplexing operation. Again, should the Examiner believe Tu discloses any structure or combination of structures which accomplishes multiplexing as claimed, he is respectfully requested to identify that structure.

Accordingly, the Examiner apparently fails to appreciate that a multiplexing device required by claim 1 is simply not shown in the Tu patent.

Error #2. The Examiner errs in his contention that the Figure 3 embodiment of Tu can provide any multiplexing function

The Examiner refers to the Tu reference at column 3, lines 7-9, column 3, line 40 to column 4, line 19 and column 5, lines 1-10, as purportedly teaching the structure of Figure 3 and Applicants do not dispute this allegation by the Examiner. However, the test is whether Tu and Fig. 3 provides any structure for multiplexing and in particular the claimed “optical wavelength division multiplexer/demultiplexer device” of Applicants’ independent claim 1.

The Examiner states that the cited portions of Tu “specifically performs a multiplexing function” (Official Action, page 3, first full paragraph), but does not identify any portion of the discussion of the Tu reference which discloses any structure for performing a multiplexing function. The Examiner apparently contends that if a prior art document uses the phrase “a perpetual motion machine,” then that document itself discloses the structure of a perpetual motion machine. This is simply erroneous.

Without disclosure of actual multiplexer structural in the Tu reference, Tu cannot anticipate the subject matter of Applicants’ independent claims or claims dependent thereon.

Error #3. The Examiner continually refers in the “Response to Arguments” that element 304 in the Tu reference is a “wavelength filter” when in fact item 304 of Tu is indicated as being “a dielectric multi-layered half-mirror 304” (column 3, lines 52-53)

The Examiner attempts to defend his reference that element 304 is a “wavelength filter” when this interpretation is contrary to the language of the Tu reference at column 3, lines 52-53. The

Examiner concedes in the paragraph bridging pages 3 and 4 of the Official Action that "elements 303 and 304 of the Tu reference are not identical in nature."

While the concession is appreciated, it should be understood that, as previously pointed out, element 303 is a "dielectric multilayered filter" (column 3, lines 49-50) and item 304 is a "dielectric multilayered half-mirror 304" (column 3, lines 52-53). If Tu meant to refer to two or more filters, he would have used the term "filter 304." Thus, the Tu reference cannot teach Applicants' claimed "wavelength selecting filters" because it does not teach more than a single filter.

The Examiner, in the sentence bridging pages 3 and 4 of the Official Action, appears to use a bootstrap argument for his contentions that multiplexing is performed in Tu and his speculation that the "half-mirror 304 must filter based on two operating wavelengths."

The correct explanation of the Tu reference is that there is no multiplexing. Element 304 is a half-mirror because light from the laser diode 307 must be able to pass through it during the transmit mode and also, what is left of received light (after being filtered by the single filter 303) must be directed to receiver 310. That is why element 304 need only be a "half-mirror" and does not require any wavelength selecting (or filtering) capability.

It is only because the Examiner is attempting to find that the structure disclosed in the Tu reference performs "multiplexing" (because of the misuse of the word "multiplexing"), he has to interpret the half-mirror 304 as a "filter" thereby artificially creating the claimed "plurality of wavelength selecting filters" recited in the claim.

As noted previously, because the Tu reference only teaches a single "dielectric multilayered filter 303," it does not meet the language of Applicants' independent claim and therefore does not support any rejection under 35 USC §103. Moreover, as noted previously, Tu actually teaches away from the claim 1 combination of a "plurality of wavelength selecting filters."

Error #4. The Examiner also fails to identify where the prior art teaches hollow core waveguides which are “formed in said substrate to guide light between the wavelength selecting filters”

The Examiner still fails to identify where the claimed interrelationship between the plurality of wavelength selecting filters and the “hollow core waveguides” is disclosed in the Tu reference. The claim specifies the interrelationship as being to “guide light between the wavelength selecting filters.” The Examiner fails to identify any more than a single “filter 303” in the Tu reference and thus there cannot be a waveguide which is arranged to “guide light between the wavelength selecting filters.” There is clearly a “hollow optical waveguide with multilayer reflectors” disclosed in Miura, but that disclosure itself does not disclose the claimed “plurality of wavelength selecting filters” or the hollow core waveguides formed in the substrate “to guide light between the wavelength selecting filters.”

Because the Examiner has made only an unsupported allegation that structure is in the prior art, the Examiner is taken to have conceded that there is no such disclosure in the Tu or Miura references.

Error #5. The Examiner erroneously contends that Tu’s “optical fiber 312” is “formed in the substrate 301” paragraph bridging pages 4 & 5 of the Official Action

The Examiner alleges that “optical fiber 312” in Figure 3 of the Tu reference is “formed in the substrate 301” without identifying any such structure. In Tu, the conventional optical fiber 312 (not a hollow core fiber) is placed in a V-shaped groove in the substrate and is held in place by cover 313 (column 4, line 63). Moreover, there is no evidence in Tu which suggests that the optical fiber is “formed” in the substrate as required by the claims. Thus, Tu clearly teaches away from any “hollow core waveguides” which are “formed in said substrate to guide light between the wavelength selecting filters.”

As noted above, Tu does not teach a plurality of “wavelength selecting filters” and therefore could not possibly have a hollow core waveguide guiding light between such filters, whether or not the waveguide is “formed in said substrate.” Again, this structure is simply missing from the Tu reference.

Error #6. The Examiner fails to provide any motivation for modifying Tu or combining any additional features from the Miura reference

The Examiner alleges that it would be obvious to use hollow core waveguides of the Miura reference in the structure of the Tu patent to provide "temperature insensitivity." As previously noted, the Tu reference is already temperature insensitive (see Applicants' Amendment, page 10, 3rd paragraph) and therefore there would be no motivation to import the Miura hollow waveguides and their alleged "temperature insensitivity" into the Tu reference.

As set out by the Supreme Court in the recent *KSR* decision, the burden is on the Examiner (not the applicant) to provide some explicit "analysis" as to his reason or motivation for combining elements taken from several references. As noted, the Examiner has simply failed to meet his burden of providing any reason for combining portions of the Miura and Tu references, even if the Tu reference did disclose structure which is capable of multiplexing (which it clearly is not).

Accordingly, the Examiner fails to meet his burden of establishing a *prima facie* case of obviousness and the rejection under 35 USC §103 fails.

SUMMARY

The Tu reference fails to disclose any "optical wavelength division multiplexer/demultiplexer device." Tu's half-mirror 304, which provides no frequency filtering function, is misidentified by Examiner and there is no disclosure of more than one single filter 303. The Examiner has ignored the wording of the independent claims, i.e., "guide light between the wavelength selecting filters." The Examiner fails to provide any "reason" or "motivation" for combining the two references and does not rebut the clear "teaching away."

As a result of the above, there is simply no support for the rejection of Applicants' claims under 35 USC §103. Applicants respectfully request that the Pre-Appeal Panel find that the application is allowed on the existing claims and prosecution on the merits should be closed.